and (2) the Notice To Comply, are now due on September 13, 2002. Accordingly, the subject responses are being timely filed by submission on of even date.

Please amend the subject application as follows:

In the Specification:

Please replace the "Abstract of the Disclosure" originally filed in the application with the replacement Abstract attached hereto as **Exhibit A**.

In the Drawings:

Please substitute the original Figure 4 as filed with the replacement Figure 4 attached hereto as **Exhibit B.**

In the Claims:

Please amend the claims as follows. A marked-up version of the amended claims, wherein the deleted material is in brackets and the inserted material is underlined, is attached hereto as **Exhibit C**.

1--~~98~~. (Amended) A monoclonal antibody or a fragment thereof comprising complementarity determining regions (CDRs), wherein said CDRs bind to an epitope of chemokine receptor 5 (CCR5) and said epitope comprises amino acid residues in (a) an N-terminus of CCR5, (b) one of three extracellular loop regions of CCR5, or (c) a combination thereof, and wherein the antibody is antibody PA8 (ATCC Accession No. HB-12605), antibody

PA9 (ATCC Accession No. HB-12606), antibody PA10 (ATCC Accession No. HB-12607), antibody PA11 (ATCC Accession No. HB-12608), antibody PA12 (ATCC Accession No. HB-12609) or antibody PA14 (ATCC Accession No. HB-12610).--

2/ --~~89~~. (Amended) A hybridoma producing a monoclonal antibody comprising complementarity determining regions (CDRs), wherein said CDRs bind to an epitope of chemokine receptor 5 (CCR5) and said epitope comprises amino acid residues in (a) an N-terminus of CCR5, (b) one of three extracellular loop regions of CCR5, or (c) a combination thereof, and wherein the antibody is antibody PA8 (ATCC Accession No. HB-12605), antibody PA9 (ATCC Accession No. HB-12606), antibody PA10 (ATCC Accession No. HB-12607), antibody PA11 (ATCC Accession No. HB-12608), antibody PA12 (ATCC Accession No. HB-12609) or antibody PA14 (ATCC Accession No. HB-12610). --

Cancld.

Please cancel claims ~~78-97~~ without prejudice or disclaimer.

Please add the following new claims:

3/ --~~100~~. (New) A monoclonal antibody or a fragment thereof, wherein the antibody or fragment thereof binds the same epitope as antibody PA14 (ATCC Accession No.HB-12610).--

Contd 4/ --~~101~~. (New) A monoclonal antibody or a fragment thereof comprising complementarity determining regions (CDRs) wherein said CDRs are derived from a hybridoma having ATCC Accession No. HB-12610

58

(PA14).--

--102. (New) The monoclonal antibody or fragment thereof according to any one of claims ~~98~~, ~~100~~ and ~~101~~, wherein the antibody or fragment thereof is humanized.--

--103. (New) The monoclonal antibody according to claim ~~102~~, wherein the antibody comprises a framework from a human immunoglobulin molecule.--

--104. (New) The monoclonal antibody according to claim ~~103~~, wherein the human immunoglobulin molecule is selected from the group consisting of IgG1, IgG2, IgG3, IgG4, IgA and IgM.--

--105. (New) The monoclonal antibody or fragment thereof according to any one of claims 98, 100, 101, 102 and 103, wherein the antibody or fragment thereof (a) specifically binds to an epitope on CCR5, said epitope comprising at least two amino acid sequences, wherein a first sequence comprises a portion of the amino terminal region and a second sequence comprises a portion of an extracellular loop region 2 (ECL2); (b) at a defined concentration inhibits HIV-1 infection of a CD4+ CCR5+ target cell, and (c) at the same defined concentration does not antagonize the activity of CCR5 in response to a CC-chemokine.--

--106. (New) A monoclonal antibody or fragment thereof which:

(a) specifically binds to an epitope on CCR5, said epitope comprising at least two amino acid sequences, wherein a first sequence comprises a portion of the amino terminal region and a second sequence comprises a portion of an extracellular loop region 2(ECL2);

(b) at a defined concentration inhibits HIV-1 infection of a CD4+ CCR5+ target cell; and

(c) at the same defined concentration does not antagonize the activity of CCR5 in response to a CC-chemokine.--

--107. (New) The monoclonal antibody according to claim 98, wherein said antibody is labeled with a detectable marker.--

--108. (New) The monoclonal antibody according to claim 107, wherein the detectable marker is a radioactive or a fluorescent marker.--

--109. (New) The monoclonal antibody or fragment thereof according to claim 106, wherein the CC-chemokine is selected from the group consisting of RANTES, MIP-1α, and MIP-1ß.--

--110. (New) A monoclonal antibody or a fragment thereof, according to claim 106, wherein the antibody or fragment thereof binds the same epitope as antibody PA14 (ATCC Accession No.HB-12610).--

--111. (New) The monoclonal antibody or fragment thereof according to any one of claims 106, 109 and 110, wherein the antibody or fragment thereof is humanized.--

--112. (New) The monoclonal antibody according to claim 111, wherein the antibody comprises a framework from a human immunoglobulin molecule.--

--113. (New) The monoclonal antibody according to claim 112, wherein the human immunoglobulin molecule is selected from the group consisting of IgG1, IgG2, IgG3, IgG4, IgA and IgM.--

--114. (New) The monoclonal antibody according to claim 106, wherein said antibody is labeled with a detectable marker.--

--115. (New) The monoclonal antibody according to claim 114, wherein the detectable marker is a radioactive or a fluorescent marker.--

Concld.

--116. (New) A monoclonal antibody or a fragment thereof comprising a single set of light chain CDRs and a single set of heavy chain CDRs, wherein said CDRs bind to an epitope of CCR5 and said epitope comprises amino acid residues in both the N-terminus of CCR5 and in one of the three extracellular loop regions of CCR5.--